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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/797,055	03/11/2004	Hyun-kwon Chung	1293.1691C	4700
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STEIN, MCEWEN & BUI, LLP 1400 EYE STREET, NW SUITE 300 WASHINGTON, DC 20005			EXAMINER STEVENS, ROBERT	
			ART UNIT	PAPER NUMBER
			2162	
			MAIL DATE	DELIVERY MODE
			12/28/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/797,055

Applicant(s)

CHUNG ET AL.

Examiner

Robert Stevens

Art Unit

2162

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 March 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 August 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☒ Certified copies of the priority documents have been received in Application No. 10/384,063.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
- Paper No(s)/Mail Date 20051012, 20040510, 20040311.

- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement filed 5/10/2004 fails to comply with 37 CFR §1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered. A copy of item #2 (application no. 10/797057) was not provided, as per 37 CFR §1.98(a)(2) and 37 CFR §1.98(d)(1). It is noted the item #2 application is not being relied upon for the purpose of priority, as required in 37 CFR §1.98(d)(1).

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. **Claims 1-2 and 14-17 are rejected under 35 U.S.C. 102(e)** as being anticipated by Lamkin et al (US Patent Application Publication No. 2002/0078144, provisionally filed Jul. 2, 2001 and published Jun. 20, 2002, hereafter referred to as "Lamkin").

Regarding independent claim 1: Lamkin teaches *An apparatus for reproducing audio and/or video (AV) data in an interactive mode using a markup document*, (See Lamkin paragraph [0129] discussing user interaction with an embedded web browser and Fig. 7 showing a system for AV data playback.) *comprising: a reader to read the AV data*; (See Lamkin paragraph [0111] discussing a DVD navigator for decoding and playback of media.) *a memory to temporarily store the markup document corresponding to the AV data*; (See Lamkin Fig. 7 #410 and paragraph [0106] teach a web browser for embedding video in a web page, it having been inherent that memory was required to do so.) *and a presentation engine to present the markup document according to a document life cycle*, (See Lamkin paragraphs [0105] and [0106] discussing a presentation engine.) *wherein the document life cycle comprises: a preloading process reading the markup document into the memory*, (See Lamkin Fig. 9 #922 teaching the launching of a markup language file, which inherently requires the reading of the document into memory.) *a loading process interpreting the markup document and loading the markup document on a screen*, (See Lamkin paragraphs [0106] – [0107] discussing a presentation engine that parses a markup document for controlling media playback and generating graphic portions of the display.) *and an interacting process facilitating an interaction between the markup document and a user*. (See Lamkin paragraph [0059] in context of paragraphs [0062] and [0257] teaching the control of media playback via a markup document displayed to a user.)

Regarding claim 2: Lamkin teaches *a buffer memory to buffer the AV data;* (See Lamkin Fig. 7 #410 and paragraph [0106] teach a web browser for embedding video in a web page, it having been inherent that memory was required to do so..) *a decoder to decode the buffered AV data;* (See Lamkin Fig. 7 #426 showing a DVD decoder.) *and a blender to blend the decoded AV data and the interpreted markup document, and to output the blended result.* (See Lamkin paragraphs [0074] and [0081] discussing the playback of audio and video within a web page, it having been inherent that the AV data was “blended” into the markup language web page in order to have been displayed in the web page.)

Regarding claim 14: Lamkin teaches *wherein in the interacting, the presentation engine generates a 'load' event.* (See Lamkin page 51 section “A.3.8 State Event” discussing a “Play” event having a state number of 1.)

Regarding claim 15: Lamkin teaches *wherein in the interacting, the presentation engine generates an 'unload' event in response to a request to terminate the markup document loaded on the screen.* (See Lamkin page 51 section “A.3.8 State Event” discussing a “Stop” event having a state number of 3.)

Regarding claim 16: Lamkin teaches *wherein the presentation engine performs a terminating process terminating the presentation of the markup document in response to an 'unload' event taking place during the interacting.* (See Lamkin page 54 section entitled

“A.3.16 Eject Event” illustrating the implementation of functionality for termination of markup presentation upon the unloading of a DVD.)

Regarding claim 17: Lamkin teaches *wherein the markup document is data read by the reader from an information storage medium comprising the AV data.* (See Lamkin paragraph [0152] discussing the markup document file INDEX.HTM found on a DVD.)

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. **Claims 3-4 are rejected under 35 U.S.C. 103(a)** as being unpatentable over Lamkin et al (US Patent Application Publication No. 2002/0078144, provisionally filed Jul. 2, 2001 and published Jun. 20, 2002, hereafter referred to as “Lamkin”) in view of Michael Morrison et al., (XML Unleashed, Sam’s Publishing, Indianapolis, IN, Dec. 1999, pp. 21-22, 45, 146-153, 156-172, 174-179, 184-202, 206-209, 289-290, 424, 427, 431-447, 463-467, hereafter referred to as “Morrison”).

Regarding claim 3: Lamkin does not explicitly teach the remaining limitations as claimed. Morrison, though, discloses *wherein the document life cycle further comprises a terminating process terminating the presentation of the markup document*. (See Morrison the upper right corner of the GUI window of Fig. 20.7 which shows an “X” for terminating the presentation of a markup language document.)

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Morrison for the benefit of Lamkin, because to do so provided a programmer with design mechanisms for rendering markup language documents, as taught by Morrison in the page 22 section entitled “Styling XML for Display”. These references were all applicable to the same field of endeavor, i.e., markup language programming.

Regarding claim 4: Lamkin does not explicitly teach the remaining limitations as claimed. Morrison, though, discloses *wherein the document life cycle further comprises a discarding process discarding the markup document in the memory*. (See Morrison the upper right corner of the GUI window of Fig. 20.7 which shows an “X” for terminating the presentation of a markup language document, it having been implied that a terminated process would be removed from memory as such a design option would avoid an undesirable memory leak.)

6. **Claims 5-6, 8-13 and 18 are rejected under 35 U.S.C. 103(a)** as being unpatentable over Lamkin et al (US Patent Application Publication No. 2002/0078144, provisionally filed Jul. 2, 2001 and published Jun. 20, 2002, hereafter referred to as "Lamkin") in view of Claussen et al (US Patent No. 6,981,212, filed Sep. 30, 1999 and issued Dec. 27, 2005, hereafter referred to as "Claussen").

Regarding claim 5: Lamkin does not explicitly teach the remaining limitations as claimed. Claussen, though, discloses *wherein in the loading, the presentation engine generates a document object tree where the markup document is valid.* (See Claussen col. 3 lines 36-39 and 53-58 discussing the creation of a DOM tree upon first access of a markup language document and verification against a DTD.)

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Claussen for the benefit of Lamkin, because to do so provided a programmer with mechanisms for modeling and validating markup language documents, as taught by Claussen in col. 3 lines 53-57. These references were all applicable to the same field of endeavor, i.e., markup language programming.

Regarding claim 6: Lamkin does not explicitly teach the remaining limitations as claimed. Claussen, though, discloses *wherein the presentation engine determines whether the markup document is valid by performing a document type definition (DTD) check.* (See Claussen Fig. 4 #402 and col. 3 lines 53-58 teaching verification against a DTD.)

Regarding claim 8: Lamkin does not explicitly teach the remaining limitations as claimed. Claussen, though, discloses *wherein in the loading, the presentation engine renders a node of the document object tree*. (See Claussen col. 1 lines 44-48 discussing the relationship between a DOM and a markup language page, it having been implied that such a page was rendered.)

Regarding claim 9: Lamkin does not explicitly teach the remaining limitations as claimed. Claussen, though, discloses *wherein in the loading, the presentation engine generates a document object tree by interpreting the markup document and renders the markup document based on the generated document object tree*. (See Claussen col. 3 lines 53-57 discussing a DOM tree, and col. 1 lines 44-48 discussing the relationship between a DOM and a markup language page, it having been implied that such a page was rendered.)

Regarding claim 10: Lamkin teaches *wherein in the loading, the presentation engine registers an event handler in the rendering of the markup document*. (See Lamkin page 47 section entitled “A.3.Events” discussing an Event Handler function that switches on index types. The switch/case code statement and Table 6 are suggestive of an event handling registration process because the proper processing section of the switch/case statement must be selected to provide the appropriate processing for the triggered event.)

Regarding claim 11: Lamkin teaches *wherein after the rendering, the presentation engine monitors whether an event takes place through the event handler*. (See Lamkin page 48 Table 6 showing an Event Type of “Time” which reflects the elapsed time that a video has run.)

Regarding claim 12: Lamkin does not explicitly teach the remaining limitations as claimed. Claussen, though, discloses *wherein in the loading, the presentation engine generates a document object tree by interpreting the markup document*, (See Claussen col. 3 lines 53-57 and 44-48 teaching that a DOM tree represents all nodes of an XML document.) *interprets and applies the interpreted stylesheet to the generated document object tree*, (See Claussen Abstract discussing the passing of a DOM tree and an XSL stylesheet to an XSL processor.) *generates a formatting structure based on the stylesheet-applied document object tree*, (See Claussen col. 2 lines 3-4 discussing the use of XSL/XSLT for formatting XML.) *and renders the markup document based on the generated formatting structure*. (See Claussen col. 3 lines 22-28 discussing a client request for a DOM-based web page, it having been implied that such a page was rendered at the client.)

Regarding claim 13: Lamkin does not explicitly teach the remaining limitations as claimed. Claussen, though, discloses *wherein in the preloading, the presentation engine reads a stylesheet corresponding to the markup document into the memory*. (See Claussen col. 2 lines 3-4 discussing the use of XSL/XSLT with XML documents.)

Regarding claim 18: Lamkin does not explicitly teach the remaining limitations as claimed. Claussen, though, discloses *wherein the markup document is data fetched from a network*. (See Claussen Fig. 1 showing a network path from disc storage #22 to client #12 for page data files.)

7. **Claim 7 is rejected under 35 U.S.C. 103(a)** as being unpatentable over Lamkin et al (US Patent Application Publication No. 2002/0078144, provisionally filed Jul. 2, 2001 and published Jun. 20, 2002, hereafter referred to as “Lamkin”) in view of Claussen et al (US Patent No. 6,981,212, filed Sep. 30, 1999 and issued Dec. 27, 2005, hereafter referred to as “Claussen”) and Michael Morrison et al., (XML Unleashed, Sam’s Publishing, Indianapolis, IN, Dec. 1999, pp. 21-22, 45, 146-153, 156-172, 174-179, 184-202, 206-209, 289-290, 424, 427, 431-447, 463-467, hereafter referred to as “Morrison”).

Regarding claim 7: Lamkin does not explicitly teach the remaining limitations as claimed. Morrison, though, discloses *wherein the presentation engine generates the document object tree according to a rule that a root node of all nodes is set to a document node, a rule that all texts and elements generate nodes, and a rule that a processing instruction, a comment, and a document type generate a node*. (See Morrison Figure 15.1 and the paragraph following this figure on page 290, noting that the figure tree includes a root node labeled as “document” and also text, element, version, and comments nodes. Additionally, the code Listing 15.1 on page 289 shows XML code corresponding to the document tree of Figure 15.1 of page

290, and the first line of the code includes a document type, which produces a version or processing node.)

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Morrison for the benefit of Lamkin in view of Claussen, because to do so provided a programmer with design mechanisms for rendering markup language documents, as taught by Morrison in the page 22 section entitled "Styling XML for Display". These references were all applicable to the same field of endeavor, i.e., markup language programming.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Non-Patent Literature

Hjelsvold, Rune, et al., "Web-based Personalization and Management of Interactive Video", WWW 10, Hong Kong, May 1-5, 2001, pp. 129-139.

Watanabe, Katsuyuki, et al., "Design of Video Caption Markup Language (VCML) and Development of VCML Player", ICME 2000, New York, NY, Jul. 30 – Aug. 2, 2000, pp. 163-166.

Goldberg, Ian, et al., "The Ninja Jukebox", USITS 99, Boulder, CO, Oct. 11-14, 1999, pp. 1-11.

US Patent Application Publications

Stone et al	2004/0081425
Millner	2004/0021684
Yassin et al	2003/0120758
Johnson et al	2003/0151618
Cassin et al	2003/0023427
Otsuka et al	2003/0039470
Otsuka et al	2003/0044171
Novak et al	2002/0101444
Novak et al	2002/0103817
Novak et al	2002/0138593
Rasmussen et al	2002/0126990
Hamaide et al	2002/0103830
Atmakuri et al	2002/0069410
Markel	2002/0088008
Adams	2002/0124100

US Patents

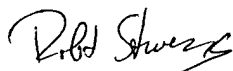
Lamkin et al	7,178,106
Novak et al	7,073,130
Novak et al	7,032,177
Nicol et al	7,281,199
Tabatabai et al	7,203,692
Markel	7,162,697
Novak et al	6,791,581
Crow et al	6,850,256
Crow et al	6,538,665
Humpleman et al	6,288,716
Humpleman et al	6,198,479
Humpleman et al	6,243,707
Schwerdtfeger et al	6,829,746
Evans et al	6,990,671
Johnson et al	6,363,204
Yoshio et al	6,215,952
Kimoto et al	6,792,577
Jarman	6,898,799
Dinallo et al	5,929,857

Contact Information

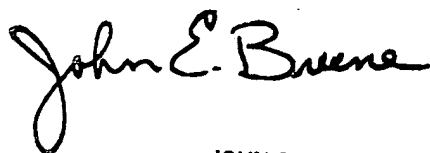
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert Stevens whose telephone number is (571) 272-4102. The examiner can normally be reached on M-F 6:00 - 2:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E. Breene can be reached on (571) 272-4107. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Robert Stevens
Examiner
Art Unit 2162

December 20, 2007



JOHN BREENE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100